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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/404,705	09/23/1999	MUNEHIRO IKEDA	12983	8701

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GARDEN CITY, NY 11530

EXAMINER

DUONG, TAI V

ART UNIT	PAPER NUMBER
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2871

DATE MAILED: 06/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/404,705

Applicant(s)

IKEDA, MUNEHIO

Examiner

TAI DUONG

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7-9,11-13 and 15-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9,11-13,15 and 16 is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 7, 8 and 17-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

The objection to the drawings and the specification, and the rejection of claims 1, 3-5, 7-9, 11-13, 15 and 16 under 35 USC 112 are withdrawn in view of Applicant's amendments and remarks.

Claims 19, 22, 25 and 28 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 19, 22, 25 and 28 reverse the steps set forth in the independent claim from which they depend. Step (e) of independent claims 17, 20, 23 and 26 recite the insulating film being formed on or covered the pixel electrode while dependent claims 19, 22, 25 and 28 recite the pixel electrodes being formed on the insulating film.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 17-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 17, 20, 23 and 26 are inconsistent with the specification and the drawings because Figs. 13 and 14 disclose that the pixel edge section is formed at the same time with the signal lines and before the pixel electrode, not after the signal lines and at the same time or after the pixel electrode as recited in step (d). Claims 17, 20, 23 and 26 are indefinite because the recited limitation "a first space between said pixel edge

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section and said first signal line is equal to a second space between said pixel edge section and said second signal line" can only be achieved after the pixel edge section being formed. In other words, effects or consequences cannot occur before causes. The same issue is also applied to the cut-out portion of the pixel electrode recited in step (c) of claim 23. In addition, it is unclear what the difference between the method of claim 20 and that of claim 26 except the preambles. Lastly, it is unclear why the preamble of claim 26 recites the bending portion but the step (c) recites the projecting portion. The remaining claims are also rejected since they depend on the indefinite claims.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Sukegawa et al.

Amended claims 1 and 5 additionally recite "said pixel electrode includes a pixel edge section *having been exposed to light*, at a periphery thereof". This limitation according to the specification is a product-by-process limitation (specification, page 16, lines 20-22; page 19, lines 22-28). However, it has been recognized that "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the

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same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Note Figs. 8 and 9 which identically disclose the claimed LCD device comprising the first and second spaces L0 being equal when the space L0 is the distance between the first (left 18) or second signal line (right 18) and the pixel edge section (18a, 18a'). Also, the pixel electrode 19 is formed on a layer 14 on which the first and second signal lines are also formed. Note the projection portion 17d extending toward the pixel electrode 19. Lastly, it is noted that the pixel edge section of Sukegawa is also inherently exposed to light due to the patterning of the pixel edge section by photo etching (col. 1, lines 26-30).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sukegawa et al in view of Yao et al.

The only difference between the above-mentioned device of Sukegawa and that of the instant claims is the pixel electrode 19 being formed on an insulating layer above the signal lines. Yao et al disclose that it was known to form the pixel electrode on an insulating layer above the signal lines for reducing the driving voltage (col. 2, lines 7-10). Thus, it would have been obvious to a person of ordinary skill in the art to form the

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pixel electrode on an insulating layer above the signal lines in the device of Sukegawa for reducing the driving voltage, as disclosed by Yao et al.

Claims 17-28 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Claims 17, 20, 23 and 26 are allowable over Sukegawa et because none of the prior art discloses or suggests the step of forming the pixel edge section after the signal lines , at the same time of forming the pixel electrode or after the pixel electrode, as recited in step (d) of the claims.

Claims 9, 11-13, 15 and 16 are allowable for the same reasons set forth in the last Office action.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

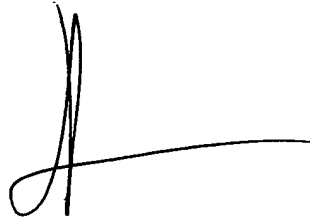
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Any inquiry concerning this communication should be directed to Tai Duong at
telephone number 703 308-4873.

TD

TVD

06/03

A handwritten signature in black ink, consisting of a stylized 'K' followed by a horizontal line extending to the right.

KENNETH PARKER
PRIMARY EXAMINER